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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/557,247

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EXAMINER

DONADO, FRANK E

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/557,247	Applicant(s) PROCTOR ET AL.	
	Examiner FRANK DONADO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/16/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 16-27 are objected to because of the following informalities: “**A method**” should be changed to “**the method**”, since there is antecedent basis for it. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren, et al (**US Patent No. 6,374,112**), in view of Koulakiotis, et al (**US PG Publication 2003/0104801**). From now on, Widegren, et al, will be referred to as Widegren and Koulakiotis, et al, will be referred to as Koulakiotis.

Regarding claim 15, Widegren teaches a method of operating a multimedia broadcast/multicast service, comprising: receiving data relating to each interested mobile station enabling determination of at least one of position within the cell and received signal quality for each interested mobile station (**Abstract, lines 2-3, Column 1, lines 23-26, Column 2, lines 28-33, Column 2, lines 58-61, Column 3, lines 16-21, Column 5, lines 44-47 and 50-51 and Column 7, lines 34-38**); calculating a preferred distribution of point-to-multipoint and point-to-point bearers for interested mobile stations in at least one predefined area within the cell (**The method determines the preferred method of delivery of service, which will be either a point-to-point or point-to-multipoint communication, depending on quality of service parameters, Column 2, lines 49-53 and 67, Column 3, lines 1-5, Column 16, lines 8-29 and Figure 9**); determining a range of a subsequent broadcast transmission by at least one of received power level and received quality at each interested mobile station of a notification message sent from a base transceiver station to the interested mobile station (**Column 3, lines 35-38 and 44-54**), the subsequent broadcast transmission using point-to-multipoint bearers; and requiring each interested mobile station which is out of range of the subsequent broadcast transmission to use point-to-point bearers to receive the service (**The point-to-multipoint connection occurs on a common channel, and the point-to-point connection occurs on a dedicated channel. Step 278 of Figure 9 indicates when a quality measure requirement is not met, a dedicated/point-to-point connection is used, and when it is met, the common/point-to-multipoint**

Art Unit: 2617

channel is used, Column 3, lines 66-67 and Column 4, lines 1-8). Widegren does not teach offering a service to mobile users where indication of interest is requested. Koulakiotis teaches a network controller broadcasting to all mobile stations in a cell, an offer of service requesting from each mobile station an indication of interest in the service **(Paragraph 61, lines 10-13, Paragraph 62, lines 1-2, Paragraph 71, Paragraph 73, lines 1-5, Paragraph 76, lines 1-7 and Figure 1).** It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Widegren to offer services to mobile users and request an indication of interest in the service for the benefit of customer satisfaction

Regarding claim 16, Widegren teaches the method according to claim 15, further comprising broadcasting at reduced power to the interested mobile stations within range **(Less power is transmitted on the common channel, as explained in claim 15).**

Regarding claim 17, Widegren teaches the method according to claim 15, further comprising broadcasting at an increased or decreased coding rate to the interested mobile stations within range **(Column 6, lines 11-20).**

Regarding claim 18, Widegren teaches the method according to claim 17, further comprising repeating the broadcast a number of times **(The method has retransmission capability, Column 6, lines 13-15 and Column 16, lines 36-42).**

Regarding claim 19, Widegren teaches a method according to claim 18, wherein the network controller broadcasts the offer of service using a multimedia broadcast multicast service channel and the interested mobile stations respond using an existing random access channel **(WCDMA spreading codes are used by the mobile stations to access the Radio Network Controller, Column 5, lines 49-60).**

Regarding claim 20, Widegren teaches the method according to claim 18, wherein the network controller broadcasts the offer of service using a multimedia broadcast multicast service channel and the interested mobile stations respond using a new random access channel **(Handoff may be implemented, Column 5, lines 61-62).**

Regarding claim 21, Widegren teaches the method according to claim 20, wherein both position and received signal quality data are received from each interested mobile station **(Column 3, lines 46-54).**

Regarding claim 22, Widegren teaches the method according to claim 18, further comprising: causing the network controller to broadcast at least one of the received power level and the received quality determined for a broadcast; and testing, in each interested mobile station, the at least one of the received power level and the received

Art Unit: 2617

quality determined for a broadcast against at least one of stored received power level and stored received quality to determine whether a point-to-point channel is required **(The point-to-multipoint connection occurs on a common channel, and the point-to-point connection occurs on a dedicated channel. Step 278 of Figure 9 indicates when a quality measure requirement is not met, a dedicated/point-to-point connection is used, and when it is met, the common/point-to-multipoint channel is used, Column 3, lines 66-67 and Column 4, lines 1-8).**

Regarding claim 23, Widegren teaches the method according to claim 22, further comprising transferring the data enabling determination of at least one of the position within the cell and the received signal quality for at least one of the interested mobile station which is not idle, from another network controller via which the at least one of the interested mobile station is connected, to the network controller broadcasting the offer of the service **(Column 5, lines 50-55 and Column 6, lines 20-21 and Figure 1).**

Regarding claim 24, Widegren teaches the method according to claim 23, wherein the service is universal mobile telecommunications service and the data is transferred from a serving radio network controller to a drift radio network controller via an interface link **(A switching may occur that allows for the mobile station to be handed over from a serving Radio Network Controller to a drift radio network controller, as is indicated by use of the interference level in a geographic location as a signal quality parameter, handoff capability and use of various**

Art Unit: 2617

Radio Network Controllers, where a radio interface link is employed, Column 2, lines 49-56, Column 3, lines 48-50 and 59-62 and Column 5, lines 50-55).

Regarding claim 25, Widegren teaches the method according to claim 24, wherein said transferring the data includes adding the data to a linking message **(A message is sent as a signal quality parameter, indicating a link between the mobile station and Radio Network Controller, Column 10, lines 64-67 and Column 11, lines 42-47).**

Regarding claim 26, Widegren teaches the method according to claim 24, wherein said transferring the data is performed on demand **(The method employs Constant Bit Rate (CBR), which is used to transport circuit-switch data, including High Speed Circuit Switched Data (HSCSD), which provides bandwidth on demand, Column 2, lines 22-23 and Column 10, lines 17-19 and 37-43).**

Regarding claim 27, Widegren teaches the method according to claim 24, further comprising changing between the subsequent broadcast transmission and the point-to-point bearer in accordance with a hysteresis diagram **(The system accounts for changes in the path that signal inputs follow. For example, the method employs a synchronized service (SS) for its dedicated channel that accounts for changes in peak bit rates due to heavier traffic. Since the method accounts for these types of unpredictable occurrences in accordance with a point-to-point**

Art Unit: 2617

bearer/dedicated channel when the radio bearer is out of range, it also does so in accordance with hysteresis, Column 10, lines 15-17 and 25-36).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,542,739 refers to priority and preemption service system for satellite related communication using a central controller.

US Patent No. 6,052,582 refers to a sectorized multi-function communication system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK DONADO whose telephone number is (571) 270-5361. The examiner can normally be reached on Monday-Thursday, 8 am-5 pm and at the same time on alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-270-6361.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-273-8300.

Frank Donado
Art Unit 2617

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617